Haibin Bai

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EDUCATION

Johns Hopkins University, School of Medicine   Baltimore, United States
Master in Biomedical Informatics and Data Sciences   Aug 2021 – Expected May 2023

Seoul National University, College of Medicine   Seoul, South Korea
PhD in Health Policy and Management   Sep 2018 – Expected Aug 2026 (On hold)
- 2020 Spring Semester Lecture & Research Scholarship
- 2019 Spring and Fall Semester SNU Global Scholarship

Seoul National University, College of Medicine   Seoul, South Korea
Master in Health Policy and Management   Sep 2016 – Aug 2018
- 19th Overseas Koreans Foundation Scholarship
- Thesis: "A Taxonomy of Health-Care Institutions in Korea Based on the Inpatient Care Function"

Capital Medical University, School of Public Health   Beijing, China
Bachelor in Health Administration   Sep 2012 – Jul 2016
- 2013-2014 University Excellent Student Physical Cadre

CERTIFICATES

Python Basics for Data Science (edX.org)	Jan 2021
Human Subjects Research (CITI Program)	Oct 2021
Information Privacy Security (CITI Program)	Oct 2021
HCUP Data Use Agreement Training	Oct 2021
Introduction to Research Ethics Course – Section I (JHU)	Dec 2021
Introduction to Research Ethics Course – Section II (JHU)	Mar 2022

RESEARCH EXPERIENCE

Johns Hopkins University   Baltimore, United States
Course project   Oct 2021 – Mar 2022
- Applied machine learning method to assess the impact of SDOH variables in LACE Index
- Collaborated with coworkers on literature review, research design, data preparation, integration/linkage, harmonization, and manuscript writing
- Mastered calculation method of LACE Index and used of Healthcare Cost and Utilization Project (HCUP) data

Seoul National University   Seoul, South Korea
Research assistant (PhD)   Sep 2018 – Dec 2019
- Designed an ideal Korean health-care delivery system model focused on inpatient care
- Collaborated with research assistants to manage project team members' administrative work; managed/negotiated with research projects agencies for contract signing, data collecting, colloquia preparation, and fund management
- Mastered calculation method of Korean version of Summary Hospital-level Mortality Indicator (SHMI) and coding mechanism of Korean version of Diagnosis Related Group (DRG)

Research assistant (Master)   Sep 2016 – Aug 2018
- Developed a classification strategy of health-care institutions based on inpatient health-care services
- Collaborated with coworkers on project administrative work and data analysis; consulted about classification of health-care institutions improvement in Taiwan
Mastered data from National Health Insurance Service and Health Insurance Review and Assessment Service (patient data sets including profiles, treatment history, and medication, etc.)

PUBLICATIONS AND PRESENTATION

Publications:

Belouali A, **Bai H**, Raja K, Liu S, Ding X, Kharrazi H. Impact of social determinants of health on improving the LACE index for 30-day unplanned readmission prediction. JAMIA Open. 2022 Jun 10;5(2):ooac046. {PMID: 35702627, DOI: 10.1093/jamiaopen/ooac046}

Liu S, Ding X, Belouali A, **Bai H**, Raja K, Kharrazi H. Assessing the Racial and Socioeconomic Disparities in Postpartum Depression Using Population-level Hospital Discharge Data: A Longitudinal Retrospective Study [published online ahead of print, 2022 Sep 14]. JMIR Pediatr Parent. 2022;10.2196/38879. doi:10.2196/38879

Reports:

Kim Y, Lee T, Kwak M, Shin H, Lee S, Kim J, Park J, Kim J, Kim T, **Bai H**. Classification of catchment area for essential medical care and analysis of current medical circumstances. 2019. Ministry of Health and Welfare of South Korea
Kim Y, et al. Developing a model for an improved medical care supply system. 2018. NHIS-2019-1-214 National Health Insurance Service of South Korea.
Kim Y, Kim T, Park S, **Bai H**, Lee Y, Jung Y, Cho S. Development of established criteria for hospital-level health care institutions. 2018. National Health Insurance Service of South Korea.
Kim Y, Shin H, Kim M, **Bai H**. Systematized plan for national children hospital inpatient expenses. 2017. Office of the national assembly Yoon.
Kim Y, Kim M, Kim T, Son C, Kim J, **Bai H**, Yu J. Calculation of classified new Diagnosis Related Group (DRG) payment adjusted coefficient. 2016. G000JA1-2016-169 Health Insurance Review and Assessment Service of South Korea.

Presentation:

Bai H, Jeong Y, Cho S, Lee Y, Kim T, Park S, Kim Y. A taxonomy of health care institutions in Korea based on the inpatient care function. The Korean Society for Preventive Medicine Fall Symposium. 2018 (Poster)
Bai H, Jeong Y, Cho S, Lee Y, Kim T, Park S, Kim Y. Classification of hospital-level health-care institutions I: clustering analysis using National Health Insurance Service data. The Korean Association of Health Economics and Policy Spring Symposium. 2018 (Oral)

Peer Review Activities:

Reviewer JAMIA Open (2021)

LEADERSHIP EXPERIENCES

Chinese Student Association at Seoul National University   Seoul, South Korea
Organizer   Sep 2017 – Dec 2019

Overseas Koreans Foundation Student Association   Seoul, South Korea
Vice president/Organizer   Feb 2017 – Aug 2018

SKILLS

Technical Skills: SAS, R, Python, ArcGIS, QGIS, Gephi, Microsoft Office